Story by Kathy Wythe

CORPS IMPROVEMENT

Engineers key players in basin restoration

One of the key federal players in the restoration of the Trinity River Basin is the U.S. Army Corps of Engineers, whose primary civil mission is developing and managing the nation's water resources, including projects to reduce flood damage; improve navigation channels and harbors; protect wetlands; and preserve, safeguard and enhance the environment.

The Corps has been involved in the Trinity River Basin for more than 50 years, but the impetus for the current projects in the Upper Trinity River Basin was mainly from findings in a Corps environmental impact statement (EIS) report in the 1980s, according to Gene Rice, Corps project manager of the Dallas Floodway and Dallas Floodway Extension projects, two of the Trinity River Basin projects.

Two major conclusions of the report were: (1) a widespread lack of Standard Project Flood protection existed, and (2) Corps and local-community permitting strategies significantly increased this lack of flood protection. At the time the EIS was issued, each city in the river basin was using its own set of criteria for permitting floodplain development.

Based on these conclusions, federal legislation was enacted to initiate studies. A reconnaissance report, published in March 1990, investigated the possible federal interest in flood control efforts/projects within the Upper Trinity River Basin. The serious potential flood threat was further verified in this report, Rice said.

The Corps, in partnership with the North Central Texas Council of Governments and its member governments along with the Texas Water Development Board initiated a follow-up feasibility study in 1990. Study efforts were directed toward addressing improvements in flood protection, ecosystem restoration, water quality, recreation, and other purposes in the Upper Trinity River Basin, with specific attention to the Dallas/Fort Worth Metroplex. Phase I of this feasibility study, which established base conditions, was completed in February 1995. Phase II of the feasibility study is ongoing.

The Corps of Engineers recently opened a new channel for the Trinity River in south Dallas. The realigned channel will help with overall flood damage reduction within the Dallas Floodway and ensure the structural integrity of the I-45 Bridge.

As a result of these studies, the Corps has numerous projects within the Upper Trinity River Basin, including:

Central City Project, Fort Worth

The Corps' Central City project, part of the larger Trinity River Vision, a master-plan community project that includes 88 miles of hike and bike trails, roads and bridges, is constructing a bypass channel and associated structures to control flood flows along the Clear Fork and West Fork of the Trinity River. The project will replace an aging levee system designed for the city's population in 1960s. Ecosystem restoration and recreation facilities are also included at locations along the project footprint.

Trinity River Project, Dallas

The project consists of raising the existing east and west levees, removing the abandoned AT&SF railroad bridge, restoring historic wetlands, bottomland hardwoods, river meanders and constructing linear recreation facilities. The Trinity River Corridor Project, a much larger overall project by the City of Dallas, includes various transportation facilities and open water for recreation.

Dallas Floodway Extension

The Dallas Floodway Extension project consists of a chain of wetlands, two levees, 123 acres of wetlands for ecosystem restoration, realignment of the Trinity River at Interstate Highway 45, 31 miles of recreational trails and protection of 1,179 acres in their natural state to mitigate environmental impacts of the project. The Corps' Fort Worth District and the City of Dallas are using an innovative approach to return floodplain value to the Trinity River, while improving flood damage reduction.

Big Fossil Creek Watershed

The Big Fossil Watershed Study will address flood damage reduction, while identifying associated water quality, ecosystem restoration and recreational opportunities within the basin. The watershed is located in northern Tarrant County, encompasses 73 square miles and drains into the West Fork of the Trinity River.